

REMARKS**Status of the Claims**

Claims 1, 2, 4-16, 22, 23, 25, 26, and 50 are pending in the present application. Claims 3, 17-21, 24, 27-49 have been cancelled.

Amendments to the Claims

Claim 1, 2, 4-6, 9, 12, 15, 22, 23, 25, and 50 have been amended. The amendments to the claims do not add prohibited new matter. Support for the amendments are summarized below.

Support for the amendments to claims 1, 2, 6, 9, and 50 can be found on page 10, lines 8-14 which describes the alkyl group as encompassing C₄ (butyl) through C₂₅.

Support for the amendments to claims 4, 5, 12, 15, and 25 can be found throughout the specification which discloses that the substituents can be substituted, unsubstituted, straight chained or branched. The substituents need not be hydrophilic, hydrophobic, or fluorophilic.

Claims 22 and 23 have been amended to exclude, by proviso, (1'RS, 5Z)-3-(1'bromohexyl)-4-bromo-5-(bromomethylidene)-2(5H)-furanone, (1'RS) 3-(1'-bromohexyl)-5-(bromomethylidene)-2(5H)-furanone. Applicants note that the exclusionary limitation added to claims 22 and 23 is merely to help define the claimed invention from the prior art. As such, this limitation is not prohibited new matter. *In re Johnson and Farnham*, 194 USPQ 187, 196 (CCPA 1977).

Claims 22 and 23 have also been amended to clarify that the compositions includes a "carrier." It is well known to the skilled artisan that the claimed compositions may contain components such as carriers which are appropriate for use as an antimicrobial or antifouling composition. These components are known to the skilled artisan. Applicants also point out that the Examples disclose production of fimbrolides in the form of compositions comprising furanones and carriers.

Rejection Under 35 U.S.C. § 112, Second Paragraph

Claims 1, 22, 23, 35, 37-40, 42-45, and 47-49 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

Claim 1 is rejected for reciting “either hydrophobic, or hydrophilic or fluorophilic.” Applicants have amended claim 1 to delete “either hydrophobic, or hydrophilic or fluorophilic”. As a result, the terms considered indefinite no longer appear in the claim. Applicants respectfully request that this rejection be withdrawn.

Claims 22, 23, 35, 37-40, 42-45, and 47-49 are rejected because these claims are directed to compositions and only recite one ingredient.

Applicants have cancelled claims 35, 37-40, 42-45 and 47-49. Claims 22 and 23 have been amended to include the term “carrier” to overcome the rejection. Accordingly, the rejection is moot.

Rejection Under doctrine of obviousness-type double patenting

A. Claims 22-23, 35, 37-40, 42-45 and 47-49 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 4 of U.S. Patent No. 6,636,692.

Claims 35, 37-40, 42-45 and 47-49 have been canceled and claims 22 and 23 have been amended to include a proviso to overcome the rejection. Amended claims 22 and 23 do not encompass the composition of claim 4 of U.S. Patent Number 6,636,692. Therefore, Applicants respectfully request withdrawal of this rejection.

B. Claims 22-23, 35, 37-40, 42-45 and 47-49 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 17-19 of commonly assigned copending Application No. 10/434,193 US 2004/0072898.

Claims 35, 37-40, 42-45 and 47-49 have been canceled. Without acquiescing to the propriety of this rejection over claims 22 and 23, Applicants respectfully point out that this is a provisional obviousness-type double patenting rejection between two applications, since the claims of Application No. 10/434,193 have not in fact been patented. MPEP 804 (I)(B) (page 800-19) states,

If the “provisional” double patenting rejection in one application is the only rejection remaining in that application, the examiner should then withdraw that

rejection and permit the application to issue as a patent, thereby converting the "provisional" double patenting rejection in the other application(s) into a double patenting rejection at the time the one application issues as a patent.

Accordingly, if this is the only rejection remaining in this case, Applicants respectfully request withdrawal of this rejection in accordance with MPEP 804 (I)(B).

Rejection Under 35 U.S.C. § 102(b)

A. Claims 1, 2, 17, 27-29, and 50 are rejected under 35 U.S.C. § 102(b), as being anticipated by CA 128:34643.

Claims 17 and 27-29 have been canceled and claim 1, 2, and 50 have been amended to overcome the rejection. Amended claims 1, 2, and 50 do not encompass the compounds disclosed by the cited reference. Claims 1, 2, and 50 as they stand are not anticipated by CA 128:34643. Applicants respectfully request withdrawal of this rejection.

B. Claims 1, 2, 17, 22-23, 25, 27-29, 37-40, 42-45, and 47-49 are rejected under 35 U.S.C. § 102(b), as being anticipated by WO 96/29392.

Applicants have canceled claims 17, 27-29, 37-40, 42-45, and 47-49. Applicants have amended claims 1, 2, 22, 23 and 25 to overcome the rejection. Amended claims 1, 2, 22, 23, and 25 do not encompass the compounds disclosed by the cited reference. Claims 1, 2, 22, 23, and 25 as they stand are not anticipated by WO 96/29392. Applicants respectfully request withdrawal of the rejection.

Rejection Under 35 U.S.C. § 103(a)

Claims 6-14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Manny CA 128:34643 or Kuelleberg CA 126:4540 in view of Cueto et al., Kotsuki et al. and WO 96/29392.

Applicants have amended claims 6, 9, and 12. Claims 7, 8, 10, 11, 13, and 14 are dependent upon amended claims 6, 9, or 12.

Claims 6-14 are directed to methods of producing fimbrolides with modified side chains by reacting a fimbrolide with a halogenating agent, an oxygenating agent, a nucleophile, an electrophile, or an oxidizing agent. The cited references do not teach methods of producing

fimbrolides by the claimed methods. Applicants respectfully point out that there is no teaching or suggestion in the cited references for modification of the fimbrolide side chain at the carbon adjacent to the furanone ring by the claimed methods. As described on page 1 (third paragraph), Applicants surprisingly and unexpectedly discovered that modifications at this precise position could be made by the claimed methods. Accordingly, the cited references do not render the claimed methods obvious. Applicants respectfully request withdrawal of the rejection.

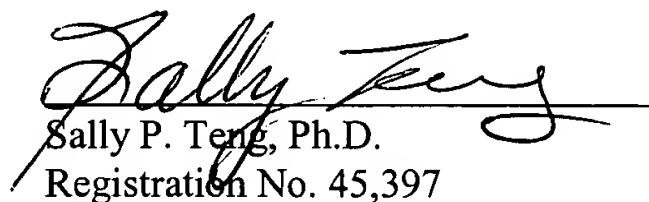
CONCLUSION

The foregoing amendments and remarks are being made to place the application in condition for allowance. Applicants respectfully request reconsideration and the timely allowance of the pending claims. A favorable action is awaited. Should the Examiner find that an interview would be helpful to further prosecution of this application, they are invited to telephone the undersigned at their convenience.

If there are any additional fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Dated: **June 1, 2005**
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Respectfully submitted
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